

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G10L11/02 G10L19/02 G10L21/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/29780 A (CLARITY LLC ; ERTEN GAMZE (US)) 11 April 2002 (2002-04-11) abstract page 1, lines 6-12, 20-23 page 2, lines 19-26 page 3, lines 2-8 page 4, lines 5-13 page 6, line 25 - page 7, line 17 page 20, line 6 - page 22, line 24 figures 8-10, 14, 15 ----- -/--	1-6

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

8 November 2004

Date of mailing of the international search report

24/11/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HYVARINEN A ET AL: "Independent component analysis: algorithms and applications" NEURAL NETWORKS, ELSEVIER SCIENCE PUBLISHERS, BARKING, GB, vol. 13, no. 4-5, June 2000 (2000-06), pages 411-430, XP004213197 ISSN: 0893-6080 cited in the application the whole document	1-6
A	GOTANDA ET AL.: "Permutation correction and speech extraction based on split spectrum through FastICA" IN PROCEEDINGS OF THE 4TH INTERNATIONAL SYMPOSIUM ON INDEPENDENT COMPONENT ANALYSIS AND BLIND SIGNAL SEPARATION, ICA 2003, 1 April 2003 (2003-04-01), pages 379-384, XP002304355 the whole document	1,3
A	SARUWATARI ET AL: "Speech enhancement and recognition in car environment usign blind source separation and subband elimination processing" 4TH INTERNATIONAL SYMPOSIUM ON INDEPENDENT COMPONENT ANALYSIS AND BLIND SIGNAL SEPARATION, ICA2003, April 2003 (2003-04), pages 367-372, XP002304368 NARA, JAPAN pag. 370, left column, section 3.2	1,3
A	MURATA N ET AL: "An approach to blind source separation based on temporal structure of speech signals" NEUROCOMPUTING ELSEVIER NETHERLANDS, vol. 41, 1998, pages 1-24, XP002304356 ISSN: 0925-2312 abstract pag 1-3, section 2 pag 8-9, section 3	1,3
A	LIN C-T ET AL: "NOISY SPEECH SEGMENTATION/ENHANCEMENT WITH MULTIBAND ANALYSIS AND NEURAL FUZZY NETWORKS" INTERNATIONAL JOURNAL OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE, WORLD SCIENTIFIC PUBLISHING COMPAGNY, SINGAPORE, SI, vol. 16, no. 7, November 2002 (2002-11), pages 927-955, XP001143964 ISSN: 0218-0014 abstract	1,3

formation on patent family members

Internal Application No.

PCT/JP2004/012899

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0229780	A	11-04-2002	AU 9498901 A	15-04-2002
			WO 0229780 A2	11-04-2002
			US 2002116187 A1	22-08-2002